

§ 245-33. Pollution and disturbance

A. Purpose: to establish controls for the following types of pollution and disturbances: noise, light and glare, air quality, hazardous materials, vibration, and electrical disturbance, in order to protect the health, safety, and the quality of the environment.

B. Applicability.

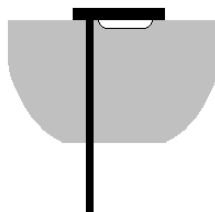
- (1) All applicants for subdivision, site plan review, special exceptions, or building permits shall be subject to the following standards. The Planning Board, Zoning Board of Adjustment, or Code Enforcement Officer shall grant approvals only upon their determination that the resulting use or development will comply with the following standards, or will not increase the extent or degree of any existing noncompliance with them.
- (2) If the Planning Board, Zoning Board of Adjustment, or Code Enforcement Officer determines that there are reasonable grounds to believe that the use or development may result in noncompliance, they may require the applicant to submit evidence sufficient to enable them to make an objective determination, such as:
 - (a) documentation of the performance of similar facilities or processes on other sites; and/or
 - (b) specifications for the mechanisms and techniques involved; and/or
 - (c) certification of compliance by an engineer acceptable to the Planning Board, Zoning Board of Adjustment, or Code Enforcement Officer for his (the engineer's) competence in the relevant field and lack of conflict in the case involved.
- (3) The Planning Board, Zoning Board of Adjustment, or Code Enforcement Officer may, at the applicants request and expense, engage an expert consultant to conduct a study and provide a report on compliance, and on means of mitigating any potential noncompliance.
- (4) The following standards shall not apply to warning devices, temporary construction or maintenance work, parades, special events, or similar temporary or transient circumstances.
- (5) The Zoning Board of Adjustment may as a special exception authorize a use not in compliance with the following, upon its determination that peculiarities of the location or activity assure that there will be no adverse disturbance to the use and enjoyment of nearby premises, and that the greatest degree of compliance reasonably feasible has been provided.

C. Noise.

- (1) On-site activities shall not at any point beyond the boundary of the premises result in sound levels which commonly exceed the ambient (background) level by more than 10 decibels or exceed the ambient level at any time by more than 15 decibels. Sound not discernible with normal human hearing two hundred (200) feet beyond a point on the boundary of the premises is presumed not to exceed the ambient level by more than 10 decibels at that point.
- (2) Vehicles parked on the premises and idling are subject to this standard, but traffic on streets is not.

D. Light and glare.

- (1) Purpose: To create standards so that outdoor lighting does not unreasonably interfere with the use and enjoyment of property within Peterborough. These standards reduce light trespass, glare, and light pollution, and promote conservation of energy, while maintaining nighttime safety, security, and productivity.
- (2) Lighting shall be designed to adequately illuminate the site and parking areas without causing glare or excessive illumination on neighboring properties or streets. Glare from vehicle headlights shall be mitigated through location and design of egresses, landscaping, and screening. Illumination of illuminated areas from light fixtures shall comply with the following table, which gives the allowable foot-candles for various types of light fixtures in varying heights, for the different zoning districts.



Zoning District	Cutoff - 90° or less	
	Average Illumination (Foot-Candles)	Max. Fixture Height (feet)
Downtown Commercial District	1.5	20
Commercial District	1.5	30
Other Business District*	1.0	25
Family, General Residence, Rural and Retirement Community	1.0	15

*Office District, Commerce Park District and Industrial District

- (3) All outdoor light fixtures shall be shielded so that no direct light is projected above a horizontal plane passing through the light source.
- (4) Light sources to illuminate signs shall be located above the objects to be illuminated and shall be shielded so that the light source is not visible from public ways and adjacent property.
- (5) Acceptable light sources are metal halide, incandescent, neon tubing and fluorescent. All other light sources including any flickering or pulsing light are prohibited. Processes, which create light flashes such as, but not limited to, electric arc welding, shall be confined to buildings or shielded to prevent either glare or flashes reflected from the sky.
- (6) Outdoor lighting shall be turned off or reduced in intensity by 11 p.m. unless an activity being lighted extends beyond that time. Lighting of display lots such as but not limited to, automobile sales or rental, recreational vehicle sales, or building material sales shall be turned off within (30) thirty minutes after closing at the end of the business day. Any lighting used after work hours shall be security lighting only, reduced from the level of full illumination lighting. Similarly, lighting of parking lots shall either be turned off or noticeably reduced to security levels after the closing of business. The intention of this requirement is to reduce after hours illumination to the greatest extent while recognizing the need for security lighting.
- (7) Lighting shall be located, shielded and maintained to prevent light trespass onto adjacent properties and public ways; measured at the boundary of the illuminated and adjacent property in excess of 0.1 foot-candles.
- (8) Exemptions to the Lighting and Glare standards:
 - (a) Installations existing prior to the enactment of this ordinance are exempt from its requirements. Alterations that would increase or replace (50 %) fifty percent or more of the existing outdoor lighting fixtures on the premises. In such case, fixtures shall conform to the requirements of this ordinance.
 - (b) Lighting of the American flag.
 - (c) Historic monuments and statues.
 - (d) One and two-family residential properties.
 - (e) Municipal street lighting.
 - (f) Emergency safety lighting.
 - (g) Fixtures of 1650 lumens or less, which are equivalent to a 150-watt incandescent light bulb.
 - (h) Photographic light flashes.
- (9) Owners or operators of non-conforming fixtures or installations are encouraged to bring their outdoor lighting into voluntary compliance with these requirements.

E. Air quality

- (1) No non-agricultural use shall cause the recurrent emission of odors detectable more than 200 feet beyond the boundary of the premises for receptors within an Industrial district, or more than 100 feet beyond the boundary of the premises for receptors in any other district.
 - (2) Off-site transmission of dust and other types of air pollution, borne by the wind from such sources as storage areas, yards, roads, and driveways, shall be kept to a minimum by appropriate landscaping, paving, or other acceptable means.
- F. Hazardous materials. If the products manufactured are toxic or hazardous as defined at §245-14B, manufacturing as the principal use of the premises may be allowed only if granted a special exception under §245-33H, upon determination by the Zoning Board of Adjustment that:
- (1) facility location, design, and contingency preparations adequately protect against risk to public health or environmental qualities; and
 - (2) for development within an Aquifer Protection district, the requirements of §245-14, Aquifer Protection District, are fully met.
- G. Vibration. No use shall be permitted which produces vibrations recurrently perceptible, without instruments, at any point beyond the boundaries of the premises.
- H. Electrical disturbance. No electrical disturbance shall be permitted which adversely affects the operation of any equipment other than that of the creator of such disturbance.
- I. Special exceptions.
- (1) Submittals. Applicants for special exceptions under this section shall submit such material, including technical analyses, as is reasonable necessary for the Zoning Board of Adjustment to make the determination under (2) below. That may include, as applicable, a lighting plan, documentation of air quality modeling, identification of any toxic or hazardous materials involved and substances to be emitted, a description of precautions, handling practices, monitoring, and recovery systems proposed, and, if appropriate, a hazard prevention and contingency response plan.
 - (2) Decision criteria. Special exceptions shall be granted if the Zoning Board of Adjustment finds that in light of peculiarities of location or circumstance:
 - (a) the proposed use will not cause unreasonable risk of harm or adverse disturbance to the environment or to other premises, and
 - (b) will not jeopardize health or safety either on or off the site, and

- (c) that either any control or safety systems being relied upon are fail-safe or redundant, or it has been demonstrated that there would be no adverse health or safety consequences beyond the boundaries of the premises in the event of system failure, in light of on-site decay, dilution, or dispersion.
- J. Utilities and dimensional controls. Notwithstanding any other provision of this chapter, development on any lot not serviced by Town water shall be governed by the minimum lot size, frontage on the nearest ROW and setback requirements of the Rural district.